

ABSTRACT OF THE DISCLOSURE

Disclosed are a semiconductor device inspection
apparatus suitable for inspecting narrow-pitched
5 semiconductor devices and an inspection method which uses
the apparatus. The apparatus has a wafer stage, a base
table, an X stage, a Y stage, an elevation unit which is
mounted on the Y stage and elevates the wafer stage up and
down, a rotary unit which turns the wafer stage, a vibration
10 elimination table which reduces vibration of the base table,
a probe card having plural probe needles which electrically
contact plural electrodes when the wafer stage moves upward,
and a probe card holder where the probe card is to be placed.
The heights of needles of the probe card are detected by a
15 laser displacement meter. Images of a wafer and the needles
are sensed by a camera. Based on image information,
positions of the wafer and probe card are computed and the X
stage, Y stage and elevation unit are controlled.